Claims

[c1] A method for protecting an electrical device, said method comprising the steps of:
monitoring a line voltage to detect a high voltage condition such that the voltage is above a predetermined voltage range;
monitoring the line voltage to detect a low voltage condition such that the voltage is below the predetermined range; and
electrically isolating the electrical device such that the electrical device does not receive electricity when at least one of a high voltage condition and a low voltage condition is detected.

[c2] A method according to Claim 1 further comprising the step of monitoring the line voltage after electrically isolating the electrical device.

[c3] A method according to Claim 2 further comprising the step of restoring power to the electrical device when the line voltage is within the predetermined voltage range.

[c4] A method according to Claim 1 further comprising the step of providing a visual indication that the line voltage is being monitored.

[c5] A method according to Claim 1 further comprising the step of providing a visual indication that a low voltage condition is detected.

[c6] A method according to Claim 1 further comprising the steps of:
providing a visual indication when a low voltage condition is detected; and
providing a visual indication when a high voltage condition is detected.

[c7] A method according to Claim 3 further comprising the step of providing a visual indication when a low voltage condition is detected.

[c8] A method according to Claim 3 further comprising the steps of:
providing a visual indication when a low voltage condition is detected; and
providing a visual indication when a high voltage condition is detected.

[c9] A method according to Claim 1 wherein said step of monitoring the line voltage

comprises the step of providing a visual indication when the line voltage is being tested.

[c10] A circuit for protecting an electrical device, said circuit configured to:
monitor a line voltage to detect a voltage above a predetermined voltage range;
monitor the line voltage to detect a voltage below the predetermined range; and
electrically isolate the electrical device such that the electrical device does not receive electricity when at least one of a voltage above the predetermined voltage range and a voltage below the predetermined range is detected.

[c11] A circuit according to Claim 10 further configured to monitor the line voltage after electrically isolating the electrical device.

[c12] A circuit according to Claim 11 further configured to restore power to the electrical device when the line voltage is within the predetermined voltage range.

[c13] A circuit according to Claim 10 further configured to provide a visual indication of the monitoring of the line voltage.

[c14] A circuit according to Claim 10 further configured to provide a visual indication when a voltage below the predetermined voltage range is detected.

[c15] A circuit according to Claim 10 further configured to:
provide a visual indication when a voltage below the predetermined voltage range is detected; and
provide a visual indication when a voltage above the predetermined voltage range is detected.

[c16] A circuit according to Claim 12 further configured to provide a visual indication when a voltage below the predetermined voltage range is detected.

[c17] A circuit according to Claim 12 further configured to:
provide a visual indication when a voltage below the predetermined voltage range is detected; and
provide a visual indication when a voltage above the predetermined voltage

range is detected.

[c18] A circuit according to Claim 10 further configured to provide a visual indication when the line voltage is being tested.

[c19] A circuit according to Claim 17 further configured to provide a visual indication when the line voltage is being tested.

[c20] A circuit for protecting an electrical device, said circuit configured to:
monitor a line voltage to detect a high voltage condition such that the voltage is above a predetermined voltage range;
monitor the line voltage to detect a low voltage condition such that the voltage is below the predetermined range;
electrically isolate the electrical device such that the electrical device does not receive electricity when at least one of a high voltage condition and a low voltage condition is detected;
monitor the line voltage after electrically isolating the electrical device to detect a voltage within the predetermined range;
restore power to the electrical device when the line voltage is detected to be within the predetermined voltage range;
provide a visual indication when a low voltage condition is detected;
provide a visual indication when a high voltage condition is detected; and
provide a visual indication when the line voltage is being tested.